

XXXV.—*Ornithological Notes from Mesolonghi and Southern Ætolia.* By W. H. SIMPSON, M.A., F.Z.S.

THE two great rivers of Western Greece, the Aspro-potamo (*Acheloiüs*) and the Phidaris (*Evenus*), which drain the highlands of Ætolia and a portion of the more distant Epirus, finally emerge from the mountains at either extremity of the range anciently called *Aracynthus*, though now a variety of names are assigned to particular blocks of that mountain. The alluvial deposits from these two rivers, more especially from the Aspro-potamo, whose volume of water is very great, appear to have formed in the course of ages the extensive tract of low marshy ground which constitutes the south-west angle of Continental Greece. This district is unequally divided by the great lagoon of Mesolonghi, which, having an average depth of less than four feet, may be justly considered as forming a part of the great alluvial tract those rivers have deposited in the deep waters of the Ionian Sea. The lagoon is studded with groups of flat muddy islets, and is protected from the sea itself by a sandy spit many miles in length, and, where this terminates, by a chain of small islands of a similar character. Towards the east, where the vulture-haunted cliffs of Mount Varassovo (*Chalkis*) mark the limits of the plain in this direction, the Phidaris has already, within the historic period, extended its own delta by filling up several small lakes. The lower portions of this delta constitute at present a damp jungle, very difficult to penetrate, which is full of tall poplars, willows, and plane trees, and where the water is up to the ankles or the neck, according to the state of the river. This jungle was probably the haunt of the Calydonian boars, as the ruins of Calydon, the ancient capital of Ætolia, are on the slope of Mount Aracynthus, just over the spot where the river emerges into the low grounds. From these ruins it is about two hours' walk to the town of Mesolonghi, through a fertile and partially cultivated plain.

The town itself is on a flat peninsula, almost flush with the lagoon, and cut off from the mainland by a muddy ditch, which is a favourite resort for *Tringa subarquata* and other small waders during the spring migration; *Charadrius cantianus* may fre-

quently be seen running about close to the parade-ground, which, however, is generally under water during the winter months. North of Mesolonghi is a narrow fringe of level ground squeezed in between the lagoon and the steep slope of Mount Aracynthus. Wherever the springs from the subterranean channels of this mountain burst out, a marsh is formed, generally extending to the lagoon itself; and, as neither these waters nor those of the lagoon are ever frozen, the number of wild-fowl to be found here in winter is very great.

The delta of the Aspro-potamo is much more extensive and varied in its character than that of the Phidaris, as it comprises within itself a number of small rocky hills, exactly resembling the islets so numerous on the west coast of Acarnania (the ancient *Echinades*), which may some day be joined to the Continent, as these have been. Within the historic period a great lake has here been converted into a swamp, more or less accessible according to the state of the water, and there are vast tracts of reeds and sedges intermingled with watery meadows and slippery maize-fields occurring at intervals throughout its whole extent.

It may readily be understood that such a district as this between the two great rivers, including of course the outlying portions of their respective deltas, is eminently favourable to water-fowl, both those species which frequent the salt and those which like the fresh water best. Waders, Geese, Ducks, Gulls, and Terns of many species are here to be met with at different seasons of the year, and when a hard winter drives them down from the marshes of Dalmatia and Albania, their numbers are immense. A sportsman will meet with all sorts of wild-fowl, from a Jack Snipe to a Pelican; and an ornithologist will take still further delight in observing the numerous Harriers, Eagles, and other birds of prey, which are sure to congregate where their natural food is so plentiful. The thickets on the alluvial plains are equally favourable to many of the smaller birds, especially to numerous species of *Sylviadæ*. The gardens and vineyards are full of that most beautiful bird, *Emberiza melanocephala*; and the stony slopes of the lower hills are enlivened by the gay colours of the Blue Thrush (*Monticola cyaneus*) and the

restless little Russet Wheatear (*Sax. stapezina*). Towering above all the mural precipices of Varassovo (*Chalkis*), Aracynthus affords an appropriate abode for the numerous Raptore which look down upon the wide extent of forest, morass, and lagoons beneath them.

Of the Vultures, *V. fulvus* is the most common; indeed it may be said to be numerous, having extensive breeding-places in Mount Varassovo and in the Klissouras of Aracynthus. The former mountain is a great favourite with them, as it commands a most extensive prospect, not only over the Mesolonghi district, but also over the great and varied plain of Northern Elis in the Peloponnesus. The winter of 1859-60 was a good one for Vultures, as cattle died in immense quantities owing to a want of grass; indeed there was more work for them than they could get through, in spite of their numbers.

Throughout the long range of Aracynthus, the face of the mountain towards the lagoon abruptly terminates in a line of precipices of moderate depth near Mesolonghi, but increasing as one approaches Ætolia and the head of the lagoon itself. I am not sure that the Griffon breeds in these; but the mountain is near the latter town penetrated, at right angles to this line of lower precipices, by three tremendous fissures, which we used to know as the Grand Gorge, the Little Klissoura, and the Great Klissoura. The two first pierce deeply into the heart of the mountain, but the latter cuts completely through it into the great plain of Agrinion, the richest and most important district of Central Ætolia. In all three Klissouras the Griffon is at home. My companion, Dr. Krüper, with the assistance of his German servant, took two or three nests in February last out of the Grand Gorge, where also he noticed *Gypaëtus barbatus* and *Strix bubo*, the latter probably breeding. As the Greek shepherds could not be induced to venture down the rocks in search of eggs, Krüper and his man had to do it themselves. The plan they adopted was, that one should hold the rope whilst the other descended hand under hand: not difficult so far as the descent is concerned, but by no means easy for getting up again. About a week before I joined him, they were working at a nest in the Little Klissoura, when Krüper, who was at the top, felt the rope

suddenly slacken, and heard a cry from beneath. It took him nearly an hour to reach the foot of the precipice, and there he found his unfortunate comrade, severely injured, but still alive. No one knew how the accident had happened, as the man himself was unable to give any account of it up to the time when I left Mesolonghi, where he lay in the military hospital, with a fair chance of recovery. In such a lonely spot some time elapsed before assistance could be obtained, and then the natives haggled over the bleeding and almost senseless body for the amount of the reward they were to receive on carrying him down to Ætolico.

The Lammergeyer (*Gypaëtus barbatus*) is not numerous in this mountain. Only one pair was actually recognized, though a single adult bird was occasionally observed in the Grand Gorge, where, amongst the holes high in the upper tier of cliffs, he may have had an eyry. This is decidedly a scarce bird throughout Western Greece: in all the Raptorial districts I have visited, its proportion to *V. fulvus* is very small indeed; yet, wherever there is any large colony of the latter, a pair of *G. barbatus* may be looked for, and generally in the deepest hole on the shady side of the most inaccessible rock. He is not a demonstrative bird, like the Griffon, who may be seen sailing about at a great height in the air, sometimes alone, but more often in troops of from half a dozen to fifty, revolving in endless circles round each other, that no corner may remain unseen. The Lammergeyer, on the contrary, may be observed floating slowly at a uniform level, close to the cliffs of some deep ravine, where his shadow is perhaps projected on the wall-like rocks. If the ravine has salient and re-entering angles, he does not cut across from point to point, but preserves the same distance from the cliff; and when he disappears in any lateral fissure, you feel sure of the very spot where he will emerge on turning the corner of the precipice. Marrow-bones are the dainties he loves the best; and when the other Vultures have picked the flesh off any animal, he comes in at the end of the feast and swallows the bones, or breaks them and swallows the pieces, if he cannot get the marrow out otherwise. The bones he cracks by taking them to a great height, and letting them fall upon a stone. This is pro-

bably the bird that dropped a tortoise on the bald head of poor old Æschylus. Not, however, that he restricts himself, or the huge black infant that he and his mate are bringing up, in one of the many holes with which the limestone precipice abounds, to marrow, turtle, bones, and similar delicacies: neither lamb, hare, nor kid come amiss to him, though, his power of claw and beak being feeble for so large a bird, he cannot tear his meat like other Vultures and Eagles. To make amends for this, his powers of deglutition are enormous. The Greeks believe he will swallow and digest anything; but the stories I have heard on this point are too marvellous to be mentioned in the 'Ibis'*. The character of the Greeks for mendacity is well known: any naturalist travelling in this country will find their information as unreliable as their assistance is unwilling. I once saw a mature bird of this species which had evidently swallowed a bone, or something uncommonly indigestible, close to the *abattoir* at Athens. He was in a very uncomfortable attitude, and appeared to be leaning on his long tail for support. After riding round in continually decreasing circles till within ten yards, I dropped off horseback and made a rush at him; but he just managed to escape, and then rising slowly till about the height of the Acropolis, made off towards the Gorge of Phyle, where there is an eyry. The Lammergeyer has an extremely ugly countenance; this becomes perfectly diabolical when he is irritated and shows the bright red round his eyes. Altogether, what with his black beard, rufous breast, and long dark tail, he is an awful-looking beast, and has the reputation of committing divers evil deeds,—such, for instance, as pushing lambs and kids, and even men, off the rocks, when they are in ticklish situations. Nevertheless he is a somewhat cowardly bird, has a feeble querulous cry, and will submit to insults from a Falcon not a fourth his size or weight.

The only inhabited nest of this species we discovered was situated in the face of the upper tier of precipices which form the re-entering angle of the Great Klissoura, looking due north, and

* One man averred that an old axe-head had been found in this bird. If so, the meeting of the marrow-bones and cleaver must have been affecting in the extreme.

facing the northern arm of that extraordinary fissure ; of which I ought to attempt a short description, as, besides the Lammergeyer's nest, it contains by far the largest colony of *Vultur fulvus* in these regions.

In all mountainous countries it is usual to find passes across the lowest part of the ridge of any chain ; but here, a mountain 2000 feet high, and between two and three miles wide, is split asunder from the top to a depth of 1500 feet by an irregular chasm, consisting of two great arms, one of which, pointing W.S.W., opens out upon the plain and lake of Ætolico ; and the other, pointing nearly due north, debouches on the forest valley which leads to the plain of Agrinion. On entering from the westward, the first thing that strikes the attention is a semicircular sweep of precipices high up on the left, provided with holes, and a place of call for a small community of Griffons. Beyond this for a short distance the rock is so steep that no large bird could breed upon it ; the very summit is crowned by a few of the Mountain Pines of Greece (*Pinus picea*?). On the right the precipices increase in height towards the corner of the gorge, which is a little more than halfway through. They consist here of two principal tiers of hard limestone rock, dipping at a moderate angle from the anticlinal axis of the mountain, and consequently increase in elevation the nearer we approach the centre. Our nest of *Gypaëtus* is in a cliff belonging to the upper tier, just before we arrive at the great gap which marks the head of the extreme corner of the gorge. Any one standing on the small path at the bottom, after making the slight ascent which marks the summit of the track, will have this cliff more than 1000 feet above him on the right hand ; and on the same side he will have a good view of the two steep and gloomy fissures through which it is just possible to attain the heights above. Looking back through the ravine he has just been threading, he will get a bird's-eye peep of the lake and plain of Ætolico glistening in the sunshine, whilst the pools at his feet are probably frozen dry in the month of February, so chilly is the sunless spot. On his left hand, far down the northern arm, he will catch a glimpse of the fort which commands the entrance to this most notorious pass ; and directly in front he will see the

mural precipice which bounds the northern arm in one continuous wall of rock for upwards of a mile at an elevation of 1000 feet. The great colony of Griffons inhabits the ledges and caverns of this extensive precipice. The principal "club" or place of call is in an enormous hole exactly opposite the western arm, which the sun bakes powerfully of an afternoon, and where many birds from the less favoured localities look in to have a talk with their neighbours.

It was on the morning of the 1st of March that Dr. Krüper and myself, after examining the cliffs from this spot, ascended one of the fissures before mentioned to determine the exact position of the Lammergeyer's nest. Following our usual plan, we stationed ourselves at different points, whilst the Doctor fired his gun. Nothing appeared, and we were just going away, when the Lammergeyer was seen quietly floating back to its nest, which was so exactly over my head, that I had not noticed her as she quitted it after the discharge. Viewed from beneath, the place seemed somewhat awful; still we had hopes: yet how to get above it was not so clear. However we summoned our followers, and, having engaged two shepherd boys to show us a goat track to the top, set off in high spirits at the important discovery. This being the shady side of the Great Klissoura, there is a considerable quantity of vegetation wherever the rocks are not actually perpendicular, and even these are in some places richly covered with ivy at their base. Goats are thus enabled to scramble up and down to certain ledges between the tiers of the precipice, where they nibble the leaves of the Tree-Sage, Prickly Oak, Dwarf-leaved Holly, and branches of the Wild Olive and Terebinth (which are cut down on purpose), besides any other green food they can get. Up one of these most difficult tracks our little guides now led us, displaying on the way such agility and daring as surprised me, considering that hardly any reward will induce them to go down into a nest. They have, however, no proper idea of using a rope, and once off their feet lose all their courage. Just as we were at the most ticklish spot, two Greeks suddenly appeared on the edge of the cliff above us, and requested the boys not to show us any further, as the shepherds did not wish strangers to become acquainted with the passes.

All these fellows up here are, or have been, brigands to a man, and, therefore, having bad consciences, see in every stranger an agent of police come to levy some unpaid tax, or to apprehend them for any little "difficulty" in which they have been engaged. But hearing we were the insane Europeans who went about that country collecting eggs, they withdrew their opposition and permitted us to continue the ascent. A well-directed stone would have sent the whole party to perdition, as at that time we were clinging like flies to a wall. One of the volunteers did make himself scarce at this point, not caring to face it any more.

The Great Klissoura, till within the last three years, was the most noted place in all Western Greece for robberies. Whole parties have been murdered here, and frequent combats have taken place since the War of Independence between the troops and the brigands. During that period and up to the year 1857, no less than 1200 people have lost their lives in these affairs, as I was informed by the sergeant in command at the fort. Fine times these for our friends the Griffons! No wonder there is such a thriving community close at hand. To the present chief of the police at Mesolonghi the credit of putting a stop to such a state of things is due; but the same people are still here—those savage Ætolians, who, in Thucydides' time, were said to be "rude of tongue and eaters of raw meat" *—men that swagger about with long guns and a bellyful of pistols, perpetually carrying arms, as did their predecessors in these same mountains at the beginning of the Peloponnesian war, long after the other Greeks had discontinued the practice †.

These two fellows heard our proposal to take the Lammergeyer's nest with a sort of suspicious incredulity, though, to do them justice, this reserve gradually wore away, and they even volunteered to produce a man who would go down. But his courage quickly evaporated as soon as he saw the place, and so indeed did mine when I thought of the bungling crew with whom I should have to work. As an instance of the want of

* ἀγνωστότατοι δὲ γλῶσσαν καὶ ὠμοφάγοι εἰσὶν, ὡς λέγονται (Hist. iii. 94).

† τό τε σιδηροφορεῖσθαι τοῖς τοῖς ἡπειρώταις ἀπὸ τῆς παλαιᾶς ληστείας ἐμμεμένηκε (*ibid.* i. 5).

observation in these shepherds, I may mention that not one of them knew of the nest until we pointed it out, although there is every probability that a pair of these birds have bred somewhere in the cliff from time immemorial. Dr. Krüper and myself, with the assistance of my Italian servant, took the measure of the position as well as we were able. From this it appeared that the hole containing the nest was 70 feet below the edge of the precipice, and about 100 feet above the point where a plumb-line let fall from the top touched the talus, which sloped away from the base of the cliff at an angle of 60° towards the edge of the second tier of precipices. The chief difficulty arose from the cavity, or rather the mouth of it, being some 6 or 8 feet inside the plumb-line—so much did the upper part of the cliff overhang the rest of it. This caused our defeat, as the person let down would still have been at that distance from the edge of the hole, and must either have swung himself in, or have trusted to some more complicated apparatus than our party could manage. The conduct of the sitting bird, when driven off, made us think there was an egg not very far from being hatched, though when it became evident that the siege was to be raised, we tried to persuade ourselves it must be a young one. But the view which this cliff commands was some compensation after all our trouble. Forming almost the highest part of the upper tier of precipices on the south side of the western arm of the Klissoura, it faces the salient angle which divides the two arms from each other. The entire depth of the intervening gorge at this point is about 1200 feet, yet so narrow that the Lammergeyer could cross it in half a minute, and then sit on the most projecting rock of the salient angle watching our proceedings. To us wingless bipeds this would have been a task of three hours at least. The mule-path looks like a thread below, dotted occasionally with a few travellers and their beasts of burden. Should one of these break down, his owner divides the load amongst the others, skins him if he has time, and the carcase, which has been watched by scores of eager eyes, is very soon transferred to the cliffs above. Such a community of Vultures as there is throughout the Klissoura would appear to disgust the more noble Eagles and Falcons, or perhaps the place is too confined for them. The

Golden Eagle (*Aquila chrysaëtos*), which is scarce throughout the district, I never saw here. The Spotted Eagle (*A. nœvia*) prefers the woodlands of the plain; and Bonelli's Eagle (*A. bonellii*) appears to delight in the lower precipices facing the more open country. The Lanner or the Peregrine may breed here: we know that the former (*Falco lanarius*) occurs in the Parnassus. The Kestrel (*F. tinnunculus*) is common enough, and a few Ravens share with the Vultures the darker recesses. Neither the Chough (*Pyrrhocorax graculus*) nor the Alpine Chough (*P. alpinus*) are found, though both occur—the latter plentifully—in the Parnassus and Taygetus; but there is a colony of the White-shouldered Jackdaw (*Corvus collaris**, Drummond), which breeds about the western mouth of the gorge.

Leaving the gloomy depths of the Great Klissoura, where one never feels quite sure that the whistle of a bullet may not accompany the report of the long Greek gun which occasionally awakens its echoes, let us transfer our attention to another part of Mount Aracynthus facing the open country. Here the more accessible cliffs which form the western buttresses of the mountain overlook the lagoon of Mesolonghi, the alluvial plain of the silver-eddy (*ἀργυροδίνης*) Achelouïs, and the distant islands of the Ionian Sea. The line of precipices is not continuous; between the Grand Gorge and the Little Klissoura there are three sections of an average height of about 130 feet. They spring from a very steep talus, which is covered with their fragments, and slopes rapidly to the narrow strip of level ground bordering the lagoon. Most of the waters from the upper parts of the mountain are collected into two subterranean sources, one of which gradually oozes up through the tangled olive-grove opposite the mouth of the Grand Gorge, whilst the other forms a copious fountain beneath a small spur of rock which comes down to the edge of the lagoon itself,—thus forming a sort of freshwater marsh by the side of the salt lake. The temperature of this spring is much raised after heavy rains. It is always, especially in a morning, a favourite haunt of ducks, which are more numerous here and on the adjacent parts of the lagoon than anywhere else. Not far from this spring is a group of huge stones which have fallen

* See Proc. Zool. Soc. 1846, p. 43.

from the rocks above—a favourite spot for myself and Dr. Krüper to sit and watch the precipices on one side and the lagoon on the other. The stones themselves were not devoid of interest to an ornithologist, as we had discovered, on the 1st of June, 1859, a nest of the Blue Thrush (*Monticola cyaneus*) in a hole near the top of the largest stone about 10 feet from the ground. The nest resembled the well-known one of *Turdus merula*, but was more loosely constructed and shallower. This, however, would arise from the bird having to accommodate itself to the shape of the cavity in which the nest was placed. The eggs are of a pale greenish blue, very delicate, and without any spots. The allied species (*M. saxatilis*) does not occur so low down as this: it is said to be not uncommon in the higher districts of Greece. On the opposite side of the same stone was a nest of that most eccentric bird, *Sitta syriaca*; it had been repaired once or twice, but at that period was not inhabited. The nest was plastered over the mouth of a small cavity, and, were it not for the little round entrance-hole, would be very difficult to distinguish from the numerous structures of a species of Ant which are thickly stuck over the face of the rock, and at a distance resemble in size and appearance the nest of *Sitta syriaca* itself. But the greatest curiosity of all was to be seen under a large flat slab which projected enough to afford convenient shelter during a shower of rain. This was a nest of *Hirundo rufula*, which had been broken at one end and consequently abandoned by the bird. Meanwhile a Nuthatch had come and repaired the damage, possibly with the intention of appropriating the nest. The difference in the workmanship, and to a certain extent in the materials, was very apparent when the two were in juxtaposition. In shape, the nest of *Hirundo rufula* is so different from that of any other European bird, that this proceeding on the part of the Nuthatch was still more extraordinary.

We will, however, dismiss these two birds for awhile, and take a survey through the telescope of the cliffs above us. These consist of the metamorphic limestone common in Greece, and they possess peculiarities which always seem to me to indicate a Raptorial locality. The upper edge is generally very hard, often overhangs a little, and has a bluish-grey tinge, partly the effect

of exposure and partly the natural colour of the rock. Underneath this, with more or less regularity, occurs a band of softer rock, which wears externally a rusty-yellow colour and is very friable in its nature. In this band are found most of those holes and fissures and horizontal excavations which form such comfortable quarters for the larger birds of prey. In the more lofty precipices occur regular caves extending some way into the mountain; and there are always plenty of nice snug holes (just big enough to contain a nest), which open out upon a covered ledge common to all the families in its locality. Wherever there is a covered ledge or corridor of this sort in the Griffon colonies conspicuous for its extent and sunny position, we may expect to find established the "club" of the community. There are always a considerable number of young unmarried Griffons, known to some naturalists as *V. kolbii*, who perhaps form the nucleus of the institution; but these are joined at times by the elders of the tribe. On a nice sunny afternoon they may be seen dropping in by ones and twos at a time, and, when a quorum is established, proceed to their business, whatever that may be. Some sit with their wings completely stretched out, as though they were hanging themselves out to dry after a wash; others appear to be taking a nap after dinner; but there are always a few busy ones putting their heads together, who are probably engaged in discussing the price of meat, or in arranging one of those grand expeditions during which they beat the country in such force. But we are at present looking at the cliffs above Ætolico, where, although one or two birds occasionally sail past, there is no "club" of Griffons. Here we observe another peculiarity common to the limestone precipices of Greece, viz., the deposits of white lime which are left in places on the face of the cliff by water, after it has percolated the calcareous strata of the mountain. When seen at a distance, this looks so exactly like the discharge from the nest or sleeping-place of a large bird of prey—more especially if, as is often the case, it happens to be under a likely-looking hole—that one is apt to suppose these nests much more numerous than they really are. Birds doubtless take advantage of this, as amongst so many white marks the traces of their own discharge may possibly escape detection.

In the same way *Sitta syriaca* hopes that its own bit of plaster sticking to a rock may pass muster amongst the many structures of a species of Ant.

We had long known that these cliffs were frequented by a pair of Bonelli's Eagles (*Aquila bonelli*), as also by a pair of Sea Eagles (*A. albicilla*), besides Eagle Owls, Griffon Vultures, Ravens, and Kestrels. Bonelli's Eagle we were sure must be a very early breeder, as Dr. Krüper had found a nest hatched off in the beginning of April 1859 in the same line of cliffs some miles to the southward, and although this was only the 26th of February, it was clear we could afford to lose no time. As we scrambled up towards the foot of the precipice the male Bonelli was caught sight of, evidently on the look-out for us, as we had been on the look-out for him. He had seen us long before, and now flew away to give notice of our arrival. After examining several likely places, Dr. Krüper at length pointed out a nest in one of the smaller holes which was plainly visible from the base of the precipice. We then stationed ourselves at separate points; but when the gun was fired, out started the female Bonelli from another nest which had escaped our observation. A few sticks only projected from the deep longitudinal fissure in which it was placed. This Eagle when flying shows a whitish band on the back, just above the base of the tail, which was easily seen on this occasion as she turned on her side in the air and thus presented her back towards us. In colour the whole plumage was very light. On finding that we did not stir, she came back very boldly after an absence of two or three minutes, and entered her nest, where, as she settled down, we again lost sight of her. It was agreed to defer the "assault" until the following day, as ropes would be necessary. The cliff was carefully examined both below and above, that we might lose no time during operations.

Early on the morning of February 27th, the besieging force marched through the town of Ætolico, where it created considerable excitement on account of the accident to Krüper's German servant a few days before. Some of the "loafers" accompanied us to witness the proceedings; but all but two dropped off during the ascent, and these two would never come near enough the edge of the precipice to be of any use. My Italian servant carried one

rope ; a Greek gunsmith—our only volunteer—carried the other ; Krüper and myself completed the party. It took us two hours to reach the top of the line of cliffs, and then we had to scramble down a rough gully to a point where a wild olive-tree grew out of a crack in the rock. This tree was the principal mark we had taken from below, where it seemed to be a few feet to the left of the line where the nest should be found. Underneath this the precipice broke sheer away to the bottom, but from the edge of it nothing could be seen ; and even by getting into the tree and hanging over as far as was safe, we were none the wiser. Meanwhile some one threw down a stone, and out darted the bird, taking a downward course as before, so that she was two or three gunshots off before we saw her. The light-coloured band on the lower part of the back was very noticeable on this occasion. Neither of the birds made their appearance again during operations. We then cut away the scrub to make standing room for those who had to hold the rope, and my servant was placed in front to receive orders. Everything being ready, they lowered me a few feet over the first crest of the precipice to a ledge two or three inches wide, where I could just find standing room. All doubt was now removed : there lay a pair of whitish-looking eggs—a long way farther below—upon the flattened bowl of an immense oval nest, seven-eighths of which rested on a platform inside the great fissure : this fissure concealed it from observation and protected it from the weather. If the Eagles had searched the whole line of precipices, they could not have found a more suitable spot than this snug corner at the mouth of the cave, or one indeed more interesting and curious in many other respects. The outermost branches of the wild olive-tree hung over the top and rustled in the brisk breeze, but below no draught could come : the sun baked fiercely upon the rock beneath, where a wild fruit-tree had put out its pretty pink blossoms about the same time that the Eagle had laid her eggs. It was hot summer here, yet winter a few feet above. And then, what a prospect must these Eagles enjoy of the wide domain over which they reign supreme ! The compact island of Ætolic, completely covered by the town, lies almost immediately underneath their cry. The natives may be seen promenading

on the bridge in all the pride of tasseled fez and snowy fastanella. The frequent explosions in the town to-day proclaim it one of the fêtes of the Greek Church. To-night and to-morrow they will take their fill of fish, after which they are allowed to make themselves sick on bad butter, made up into various cakes, and abominations such as no other country could produce, and then no more animal food (shellfish and roe excepted) till Easter. But the Eagles are indifferent to all this. Their eyes doubtless are chiefly fixed on the two great packs of ducks now resting so quietly on either side of the long bridge, and over the waters and reedy shores of the upper lake, which is their own especial beat. If this is not enough, they overlook the whole western arm of the great lagoon of Mesolonghi, the Pelican Islands, and the immense and varied delta of the Acheloüs, with its swamps, its pastures, and its corn-fields,—broken in front by the olive-covered hill of Katza, abounding in pigeons, and beyond the river by the eminences which contain the modern Ratokki and the ruins of Œnia. After being lowered to a level with the nest, the only difficulty was to spring across the chasm separating the platform on which it rested from the cliff beneath the wild olive-tree. This done, I was in possession, and able to make a closer inspection of the nest itself, which consisted principally of branches of wild olive, terebinth, and thorn, arranged according to their size. There was no lining of wool, as is usual in Eagles' nests, but the eggs lay on a thin layer of olive-leaves. The eggs themselves, which I retain in my collection, are slightly unequal in size. The larger is of a smooth texture and bluish-white ground-colour, very sparingly marked with rust-coloured spots and minute dottings. The smaller one is of a rougher texture, in colour a dirty white, and without any distinct markings: it appears to have been laid the last. Further up the cave is a stone, on which the bird not occupied in incubating the eggs was evidently wont to sit and watch its mate. There were no bones or other remains indicating the nature of their food, though I fancy hares and partridges (*Caccabis saxatilis*) form no small portion of it. On our return down the mountain, Dr. Krüper and myself had a good view of the pair. The falconine character of their flight was very obvious as they dashed

about in the air at a great height, sometimes appearing to make a sunset backwards (reversing the action of the tumbler), in the excess of their indignation against the robbers who were looking at them.

The first nest which we discovered in this line of precipices most probably belonged to the pair of Sea Eagles that haunted the upper lake. There were several of these birds about, but the others were mostly immature ones in the dark plumage. They fly low over the water with that lumbering heavy flight peculiar to the species. If they come near the grand army of ducks, all the outlying pickets are called in, and sometimes a general retreat takes place, but always in order and without much appearance of alarm. It is not to be supposed that all the birds of this species we see here are breeding; but there are one or two undoubted eyries in the district, and these chiefly in the enormous trees that rear their heads above the almost impenetrable jungles near the lakes of Agrinion and the embouchure of the Phidaris. In the latter place there is one to which Dr. Krüper ascended in the month of May 1859. It was in a good state of repair, but contained no young,—nothing living, in fact, but a few sparrows that had built their nests with true passerine impudence in the many snug little berths which its vast circumference afforded. We took this to be an indication that the establishment was not occupied, when, just as the Doctor was coming down, a great black Eagle flew over our heads. A Golden Eagle! said we all. But our Italian solved the question by putting some shot into him, as he passed again, when he proved to be *Aquila albicilla*, in the plumage of the second year: the sex I forget. Whether the Eagle inherited this establishment from his deceased ancestors, or had found it and put it into tenantable repair, is a fact we shall never ascertain: this much is probable, that he looked upon it as his habitation, that he intended to get mated, and that in the course of a year or two more, if an untimely fate had not befallen him, he would have taken his share in the production of a pair of spotless eggs, for the benefit of the next oologist who should have the luck to find the nest and the pluck to ascend to it.

In the recesses of these marshy forests, where the rate of

travelling is less than half a mile an hour, the Spotted Eagle (*A. naevia*) also finds a congenial abode. There are generally two or three pairs in the forest to which I am alluding, and one is continually reminded of their presence by the shrill cry they utter. During the last winter I noticed a few which frequented the marshes of Ali Tchelebi across the gulf, and also the extensive forests in the plain of Agrinion. If the winter be hard, they may quit continental Greece entirely, as they feed very largely on reptiles, especially on frogs. Towards the end of February an accession to their numbers was apparent, the birds being generally seen coasting the marshy shores of the lagoon on their way northwards. Those few which winter here possibly join this migration, and their places may be occupied by others coming from further south. This, however, is merely conjecture; certain it is, that towards the beginning of May a nest or two will be found in the jungle which covers portions of the delta of the Phidaris at the foot of the unsealed precipices of Mount Varassovo. To this place (dismissing for a moment our Eagle) I would again direct attention, as one dear to the eye of an ornithologist. The tall white stems of the ash and the poplar, and the huge trunks of the wide-spreading plane-tree shoot out of a mass of tangled foliage, and support—sometimes from their topmost branches—rich curtains of dark green ivy, and festoons of the creeping vine that fall in graceful folds and pendulous lines, to mingle once more with the general mass below. Here you may see the Golden Oriole, the Jay, the Roller, and the Bee-eater, enlivening the verdure of the woods by the brilliancy of their colours, whilst from some hollow tree will start an Eagle Owl, only to hide himself in yet obscurer depths. Woodpeckers of more than one species are not uncommon, to judge by the holes they have drilled in the trees; and amongst the Tits it would not be difficult, perhaps, for a careful observer to discern *Parus pendulinus* and *Parus lugubris*, the former of which undoubtedly breeds in similar localities. A stray pair of Blackbird and Song Thrush, out of the flocks that frequent this place in winter, may remain behind to breed; but the duties of the sylvan chorus are performed by innumerable Warblers, *S. elaica*, *S. olivetorum*, *S. luscinia*, *S. altisonans*, and many others, which

however prefer the bushy outskirts and shun the depths of the forest, as does also the conspicuous *Lanius minor*, which, next to the Woodchat, is the commonest Shrike of Greece. In winter this forest is a paradise for woodcock, as are the marshes, which interlace it, for snipe and wild-duck; but many parts are inaccessible except to the wild pigs and jackals, of which there is no lack. This makes our visit to the nests of the Spotted Eagle a somewhat difficult task.

Aquila nœvia constructs a very small nest for the size of the bird: it is generally well concealed in the fork of a large tree, so that it might very easily escape observation. The exterior is neatly rounded off, and has none of those great branches sticking out which are often seen in nests of other Eagles. Inside it is comfortably lined with wool. The eggs vary considerably according to the age of the bird, but are generally handsomely marked with large spots and blotches of a rust-colour on a whitish ground. Of two which I have in my collection from the same nest, taken May 4, 1859, one has an exceedingly rich rust-coloured zone, streaked with darker shades, irregularly covering about one-third of the egg towards the smaller ends, the ground-colour being of a yellowish-white. The upper part of the egg is also marked with spots and blotches of the same colour, each one being distinct, and not in the least smudged so as to spoil the ground-colour of the egg. Except as to size, the two eggs from this nest resemble those of the Sparrow-hawk more than any other raptorial bird. The Greeks, who are the worst field-naturalists possible, have no name for this species distinct from that of any other Eagle, all of which they call indifferently *ἀετός*, in the same way that they call all Vultures *ὄρνις*. The Golden Eagle (*Aquila chrysaëtos*) is certainly not common in this district, and the Imperial Eagle I never once saw. There did occur during last winter a very black Eagle, which appeared to me much smaller than *Aquila chrysaëtos*, though similar in character. Can this have been the *Aquila fusca* of Brehm?